CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER NO. R5-2004-0712

FOR

KAUTZ VINEYARDS INC., JOHN AND GAIL KAUTZ HAY STATION RANCH, IRONSTONE VINEYARDS CALAVERAS COUNTY

This Order is issued to Kautz Vineyards Inc. and John and Gail Kautz (hereafter Discharger) and is based on provisions of California Water Code Section 13304 which authorize the Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) to issue a Cleanup and Abatement (C&A) Order.

The Executive Officer of the Regional Board finds, with respect to the Discharger's acts, or failure to act, the following:

- 1. Kautz Vineyards Inc., and John and Gail Kautz own and operate the Hay Station Ranch and Ironstone Vineyards. The winery facility, which is in the community of Murphys, is on Assessor's Parcel numbers 66-010-04 and 66-022-01, and in Sections 7, 8, and 18, T3N, R14E, MDB&M.
- 2. Waste Discharge Requirements (WDRs) Order No. 5-01-063, adopted by the Regional Board on 16 March 2001, prescribes requirements for the treatment and disposal of winery wastewater generated at Ironstone Vineyards, and for the disposal of reclaimed wastewater generated by the Murphys Wastewater Treatment Plant. This C&A only pertains to the disposal of the winery wastewater.

Background

- 3. WDRs Order No. 5-01-063 permits the treatment and disposal of up to 146,000 gallons per day (gpd) of winery wastewater. Winery wastewater is collected in three underground tanks, screened, and pumped to a 3.5 acre pasture for disposal.
- 4. At the time the WDRs were written and adopted, the Discharger could not comply with Discharge Prohibition A.9, or Discharge Limitations C.2 through C.4 of the WDRs. Therefore, the Discharger was given one year from the adoption date to come into full compliance with the WDRs. Discharge Prohibition A.9 states "Disposal of winery wastewater during rain events or when the soil is saturated is prohibited". Discharge Limitation C.2 limits the loading of BOD to the spray disposal field to 100 lbs per acre per day, while Discharge Limitation C.3 limits nitrogen loading to 150 lbs per acre per year. Discharge Limitation C.4 states "Winery wastewater effluent shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
TDS	mg/l	450	1000
Nitrate as nitrogen	mg/l	10	45

5. Provision H.2.c of the WDRs required the Discharger to submit a workplan by 1 August 2001, describing facility changes necessary to meet compliance with all Prohibitions and Specifications

- contained within the WDRs. On 11 October 2001, the Discharger submitted the "*Kautz Ironstone Winery Workplan*". The Discharger proposed to construct a pond to store winery wastewater during the winter months and to discharge the winery wastewater to new land application areas.
- 6. On 31 December 2001, staff provided comments on the workplan, stating that the proposal was not adequate to comply with all of the requirements outlined in the WDRs. Therefore, staff required the Discharger to submit a revised workplan by 30 January 2002.
- 7. On 27 March 2002, the Discharger submitted a letter stating that it had retained a new consultant to revaluate the proposed wastewater treatment system. The Discharger stated that it would submit a revised workplan and upgrade the wastewater system according to the following schedule:
 - a. Prepare and submit a conceptual plan for wastewater treatment system design by April 29, 2002;
 - b. Prepare and submit a Preliminary Design by 6 June 2003;
 - c. Prepare and submit a Final Engineering Design and Report of Waste Discharge (RWD) by 5 August 2002; and
 - d. Complete construction of the new winery wastewater treatment and disposal system by November 2003.
- 8. On 29 April and 31 May 2002, the Discharger submitted two separate reports, a *Conceptual Design Report* and a *Facility Improvement Report*, which address, respectively, future upgrades and improvements to the wastewater system, and the improvements already made to the current wastewater system to comply with the WDRs. In the *Conceptual Design Report*, the Discharger proposed to construct a facultative pond, constructed wetlands, and winter storage pond, and to dispose of treated wastewater on vineyards. As described in the *Facility Improvement Report*, improvements made to the current wastewater system include pH neutralization of wastewater prior to discharge; installation of two 14,000 gallon above ground storage tanks to contain wastewater when disposal to the spray fields cannot take place; increasing the size of the spray disposal fields to 4.5 acres to reduce wastewater constituent loading rates; and eliminating the use of detergents and caustic solutions for cleaning to reduce sources of total dissolved solids.
- 9. On 7 August 2002, staff met with the Discharger to discuss the proposed improvements to the wastewater system, such that it would comply with the WDRs. During the meeting, the Discharger stated that it was reconsidering whether to make the described improvements in the *Conceptual Design Report*. The Discharger instead stated that it would make smaller physical and management changes to the wastewater system, and believed those changes would result in compliance with the WDRs.
- 10. On 26 February 2003, staff issued a Notice of Violation (NOV) to the Discharger for violations of the WDRs, including failure to comply with the monthly average and daily maximum TDS effluent limits, spray irrigation of winery wastewater during rain events, and failure to submit complete monitoring reports.
- 11. On 25 September 2003, staff issued a NOV to the Discharger for continuing violations of the WDRs. The violations were the same as those described in the 26 February 2003 NOV. The

Discharger was required to submit a technical report by 20 December 2003 that evaluated the winery treatment and disposal system, proposed specific changes to comply with the WDRs, proposed a groundwater monitoring system to determine compliance with the Groundwater Limitations, and proposed a timeline for each step.

- 12. On 25 October 2003, the Discharger submitted a letter describing a recent salinity evaluation of the wastewater. First, source control measures were adopted; however, the TDS concentration of the wastewater was not significantly reduced. The Discharger then conducted a wastewater testing program to characterize major ionic species. Results of the testing program indicate that TDS can be quite variable, and wastewater is enriched with sodium, potassium, and sulfate. Sodium was the most prominent ion detected, with the most probable major source being the addition of sodium hydroxide to adjust the pH of the wastewater.
- 13. On 20 December 2003, the Discharger submitted the technical report as required by the 25 September 2003 NOV. The technical report contains a review of the wastewater system and a characterization of the soil in the land disposal area. The report contains a number of conclusions and recommendations, among them:
 - a. The elevated TDS concentration in effluent is caused by the pH adjustment of the wastewater with sodium hydroxide. The Discharger recommended that it discontinue the pH neutralization of the wastewater, and requested that the Regional Board issue a temporary wavier to violate the WDRs' pH effluent limitation, through such means as a Cease and Desist Order or other appropriate enforcement order.
 - b. The use of sodium to neutralize the pH of the wastewater is negatively impacting the chemistry of the shallow soil in the land disposal area. There is evidence of a significant accumulation of sodium in excess of that which the vegetation in the spray field can tolerate.
 - c. The Discharger proposed to undertake a study to evaluate alternative sites for land discharge of winery wastewater, followed by the submittal of a Report of Waste Discharge requesting modified pH and TDS effluent limitations. The Discharger also proposed to prepare an operation, maintenance, and monitoring plan for the selected disposal area.
- 14. Based on the above violations and the Discharger's proposed solutions, staff prepared a draft Cleanup and Abatement Order and transmitted it to the Discharger for comments. The Discharger's 14 May 2004 letter proposes an alternative workplan and time schedule to what was described in its 20 December 2003 technical report. The Discharger would now like to complete several technical studies before it finalizes its plans for an alternative wastewater management scheme. This Order incorporates those studies.

Areas of Non-Compliance

15. Provision H.1 in the WDRs states "Compliance with Prohibitions A.9 and Discharge Limitations C.2 through C.4 shall be implemented within one year of the date of this Order. In the interim,

the Discharger shall use best management practices to reduce constituent concentrations in the winery wastewater, and maintain compliance with all other Prohibitions and Specifications contained within this Order". The WDRs were adopted on 16 March 2001; therefore the Discharger was to be in full compliance by 16 March 2002.

- 15. Review of self monitoring reports for the months of January 2001 through January 2004 indicate that the Discharger has not been able to consistently comply with Discharge Prohibition A.9 or Discharge Limitation C.4 of the WDRs.
- 16. The Discharger acknowledges that it cannot consistently comply with Discharge Limitation C.4, the effluent limits for TDS.
- 17. The May 2002 Facility Improvement Report states that the Discharger installed two 14,000 gallon tanks to contain process wastewater so that it can comply with WDR Prohibition A.9, which prohibits disposal during rain events or when the soil is saturated. However, staff's review of the monthly self monitoring reports indicate that disposal of winery wastewater to the spray disposal areas occurred during and/or soon after significant rainfall events in the months of March and April 2002, January through May 2003, December 2003, and January 2004.
- 18. In order to assure that wastewater will not commingle with stormwater and flow off a disposal field, more recent WDRs require that wastewater not be applied to land 24 hours before a predicted precipitation event, during precipitation, 24 hours after precipitation, or when the soil is saturated. Because the Discharger intends to request revised WDRs, it is reasonable to require an evaluation of alternatives not just to comply with Prohibition A.9, but with the updated storage requirement.
- 19. Discharge Limitation C.1 of the WDRs states "The winery wastewater shall not have a pH of less than 6.5 or greater than 8.5." The Discharger is unable to consistently meet the pH limit and still comply with the effluent limit for TDS.

Regulatory Considerations

- 20. The Regional Board's Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan) designates beneficial uses, includes water quality objectives to protect the beneficial uses, and includes implementation plans to implement the water quality objectives.
- 21. Six Mile Creek, a seasonal creek, flows through the property. It begins as drainage adjacent to the Murphys Sanitation District wastewater treatment plant storage ponds, flows through Hay Station Ranch and the Ironstone Winery facility, and finally enters Angels Creek, which is a tributary of New Melones Reservoir. The beneficial uses of surface waters tributary to New Melones Reservoir as stated in the Basin Plan are municipal and domestic supply; agricultural supply for irrigation and stock watering; industrial power supply; contact and noncontact recreation; warm and cold freshwater habitat; and wildlife habitat.
- 22. The beneficial uses of underlying groundwaters as stated in the Basin Plan are municipal and domestic water supply, agricultural supply, and industrial service and process supply. No data currently exists as to the quality of the underlying groundwater.

- 23. The Discharger has discharged waste in violation of its WDRs in part because the current winery wastewater treatment and disposal system is not adequately designed to meet all of the effluent limitations required by the WDRs, and does not have adequate storage capacity to store wastewater during prolonged and/or significant rainfall, or when the ground becomes saturated. Due to the inadequate wastewater treatment and disposal system, the Discharger has caused or permitted, or threatens to cause or permit, waste to be discharged in such a manner that it threatens to create a condition of pollution or nuisance.
- 24. Section 13304(a) of the California Water Code provides that: "Any person who has discharged or discharges waste into waters of this state in violation of any waste discharge requirements or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the water of the state, and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up the waste or abate the effects of the waste, or, in case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant."
- 25. Section 13267(b) of the California Water Code provides that: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports".
- 26. The technical reports required by this Order are necessary to ensure compliance with WDRs Order No. 5-01-063 and this C&A. The reports are also necessary to assure protection of public health and safety. The Discharger operates the facility that discharges the waste subject to this Order.
- 27. The issuance of this Order is an enforcement action by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act (CEQA), pursuant to Section 15321(a)(2), Title 14, California Code of Regulations.
- 28. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board (State Board) to review the action in accordance with Section 2050 through 2068, Title 23 of the California Code of Regulations. The petition must be received by the State Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions are available at http://www.swrcb.ca.gov/water_laws/cawtrcde/wqpetition_instr.html and will also be provided upon request.

IT IS HEREBY ORDERED that, pursuant to Sections 13304 and 13267 of the California Water Code, Kautz Vineyards Inc. and John and Gail Kautz shall cleanup and abate, forthwith, the wastewater

treatment and disposal system such that all the requirements prescribed in WDRs Order No. 5-01-063 are met. "Forthwith" means as soon as is reasonably possible.

- 1. With the exception of Discharge Limitation C.1 of WDRs Order No. 5-01-063, the Discharger shall **immediately** comply with all aspects of WDRs Order No. 5-01-063. The Discharger shall take all reasonable steps to comply with Discharge Limitation C.1.
- 2. By **15 October 2004**, the Discharger shall submit *Feasibility Study* (FS) describing an evaluation of alternative winery wastewater system improvements. The FS shall describe (1) the alternatives that were evaluated to improve and upgrade the existing wastewater system to result in compliance with the WDRs, (2) the technical feasibility of each alternative, (3) capital, maintenance, and operational costs of each alternative, and (4) potential constraints of each alternative.
- 3. By **15 October 2004**, the Discharger shall submit a *One-Time Groundwater Sampling Event Workplan* for areas considered feasible for the storage and disposal of winery wastewater. The workplan shall clearly describe the number of samples to be collected, sample locations (if known; if not, then generalized), field techniques used to collect the samples, sampling handling techniques, and the proposed analytical tests.
- 4. By **30 December 2004**, the Discharger shall submit a *Site Evaluation Study* describing a study undertaken to evaluate feasible alternative sites to the current 4.5 acre land disposal area. The study shall evaluate soil and groundwater conditions at the new site, and provide a detailed assessment of the soil type, depth to weathered rock, soil profile, and an assessment of soil pH buffering capacity.
- 5. By **30 December 2004,** the Discharger shall submit a *Winter Storage Evaluation Report*. For the anticipated flow limit in the revised WDRs, the report shall evaluate the necessary storage capacity assuming that wastewater may not be applied to the disposal/reuse areas 24 hours before a predicted precipitation event, during precipitation, 24 hours after precipitation, or when the ground is saturated. Local rainfall data for an above-average rain year shall be used in the determination. If the current 28,000 gallons of storage capacity is insufficient, the report shall contain a conceptual plan to increase capacity, and shall show that any proposed or existing storage structure has enough capacity to contain all wastewater generated, inflow/infiltration, and rainfall generated during a 100-year annual precipitation event.
- 6. By **28 February 2005**, the Discharger shall submit a submit Report of Waste Discharge (RWD) that contains a Form 200 (*Application for Report of Waste Discharge*) and answers to the questions listed in Attachment A, "*Additional Information Requirements for a Report of Waste Discharge*".
- 7. By **28 February 2005**, the Discharger shall submit a *Groundwater Sampling Report* that presents the results of the one-time groundwater sampling event. The report shall provide the locations where groundwater samples were collected, depths at which samples were collected, and the analytical results from each sampling location.

8. Beginning with the **Third Quarter 2004**, the Discharger shall submit quarterly progress reports describing the work accomplished to date to comply with this Order. The progress reports are due the first day of the second month following the end of the quarter (i.e., by **1 February**, **1 May**, **1 August**, and **1 November**). The Third Quarter 2004 report is due by 1 November 2004.

In addition to the above, the Discharger shall comply with all applicable provisions of the California Water Code that are not specifically referred to in this Order. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all technical reports shall be prepared by, or under the supervision of, a California Registered Engineer or Registered Geologist and signed by the registered professional.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

Failure to comply with this Order may result in the assessment of an Administrative Civil Liability up to \$1,000 or up to \$10,000 per day of violation, depending on the violation, pursuant to the California Water Code, including sections 13268, 13271, and 13350. The Regional Board reserves its right to take any enforcement actions authorized by law.

This Order is effective upon the date of signature.

THOMAS R. PINKOS, Executive Officer

13 July 2004
(Date)

Attachment A: Additional Information Requirements for a Report of Waste Discharge

JSK: 2-Sep-04